PRIMARY TUBERCULOSIS OF THE PROSTATE GLAND*

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A careful search of the literature shows but two probable cases of primary tuberculosis of the prostate reported. This is most surprising, and in all probability does not represent a true percentage of the primary invasion of the gland by the tubercle bacillus, but a deplorable failure on the part of surgeons to have careful histologic examinations made of their specimens.

In spite of the many opinions offered, we must confess our ignorance that we do not actually know the mechanism by which the tubercle bacillus invades the genital organs. It is therefore difficult to say absolutely whether a seeming primary genital or urinary tuberculosis is or is not secondary to some other focus, possibly from caseated peribronchial or mesenteric lymph-nodes.

The accompanying statistics compiled from a monograph on prostatic tuberculosis are of interest:

Cornet[1] found in 10,000 deaths from tuberculosis other than pulmonary 1 per cent. urogenital. Kapsammer found in 20,700 postmortems 1 per cent. urogenital tuberculosis. Oppenheim found that in 37 deaths from genito-urinary tuberculosis 30 had pulmonary involvement. Reclus, 100 cases genito-urinary tuberculosis, 98 had lung involvement. Desnos, 16 cases prostatic tuberculosis, 6 had lung involvement. Julien, 41 cases of prostatic tuberculosis, 23 had lung involvement. Krzywicki, 14 cases of prostatic tuberculosis, 12 had lung involvement. Oppenheim, 100 cases of prostatic tuberculosis, 81 had lung involvement. Rautberd, 100 cases of prostatic tuberculosis, 85 had lung involvement. Fenwick, 157 cases genito-urinary tuberculosis, 3 per cent. prostate alone involved (indefinite); 24 per cent. prostate and epididymi involved; 3 per cent. prostate and seminal vesicles involved; 6 per cent. prostate and bladder involved. Davids, 360 cases of genito-urinary tuberculosis, none primary in prostate. Hess, 23 cases of genito-urinary tuberculosis, none primary in prostate. Barney and Cabot,[2] 101 cases of genito-urinary tuberculosis, 75 per cent. prostate involved. Guisy,[3] 183 cases of genito-urinary tuberculosis; 10 involving prostate and vesicles alone; 5 prostate alone (records indefinite).

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[1] Hesse: Tuberculose der Prostata. Jena, November, 1913.

[2] Barney and Cabot: J. A. M. A., December 6, 1913.

[3] Ann. d. Mal. des Org. Genito-Urinaire, 1906, vol. i.

I am indebted to Dr. Harry Jackson, Pathologist to the Cook County Hospital, for the clinical history and specimen of tuberculosis of the prostate with extension into the bladder (Figs. 1, 2 and 3). The process in the prostate is evidently primary for the genito-urinary organs. The patient entered the tuberculosis ward of the hospital on account of cough, loss of weight and general cachexia. He did not complain of any urinary symptoms and, other than a notation that the external genitals were negative, there is no record of any physical examinations of his genito-urinary tract. He died two months later. Autopsy gave the following findings: Acute disseminated miliary tuberculosis of all the lobes of the lungs; chronic ulcerative tuberculosis of the intestines; chronic nephritis; no evidence of any tuberculous process; marked fibrocaseous tuberculosis of the prostate: tuberculous ulceration of the internal urethral orifice; bladder mucosa normal.

The two cases found in the literature are as follows:

CASE I.[4]—Patient, aged seventy. Diagnosis: Prostatic hypertrophy. Small nodules felt per rectum. The other genito-urinary organs were normal, as far as could be determined. Recovery complete in seven weeks.

CASE II.[5]—Primary prostatic tuberculosis. All other genito-urinary organs healthy. Perineal prostatectomy. Patient died later from tuberculosis meningitis.

The author's case (Figs. 4 and 5), aged sixty-one, entered the genito-urinary service of the Michael Reese Hospital, giving the typical symptoms of prostatic obstruction; complete retention having occurred four days previously. The only point of interest in the history is presence of a cough, which had been present for several years. Physical examination of chest and abdomen was entirely negative. Per rectum, the prostate felt about three times its normal size, consistency firm, surface smooth, except for two or three small nodules, which did not seem unusual. Cystoscopic examination revealed nothing except a low grade of cystitis. The median lobe protruded considerably into the bladder.

Under local anæsthesia the bladder was opened and drained by Dr. Kolischer, by whom, ten days later, the case was turned over to the writer for removal of the prostate. The patient was in the hospital five months, on account of a persistent fistula, which was uninfluenced by gradually increasing doses of tuberculin subcutaneously. This was started as soon as tuberculosis was reported by the pathologist. It is of interest to note that there was not the slightest reaction to the tuberculin, even in one milligramme doses. This is strongly suggestive that there was no other tuber-

[4] Wulff: Deut. med. Woch., 1909, p. 1332.

[5] Burckhardt: Muench. med. Woch., 1911, p. 1750.

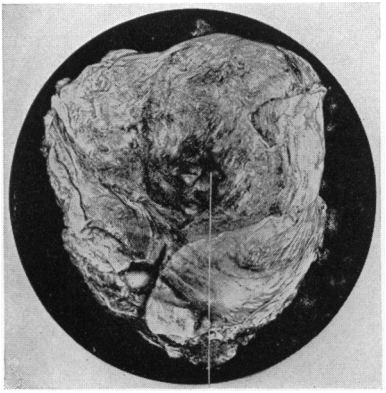

FIG. 1.—Autopsy specimen. Bladder opened. Ulceration around internal urethral orifice (*x*).

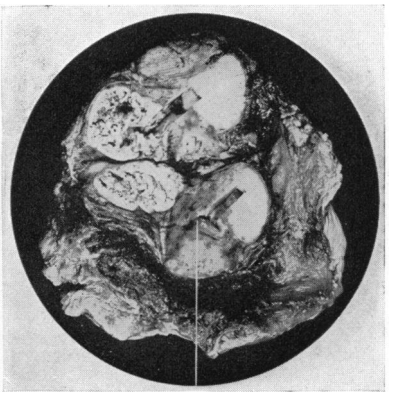

FIG. 2.—Autopsy speeimen, showing extensive involvement of the prostate. *x*, urethral orifice.

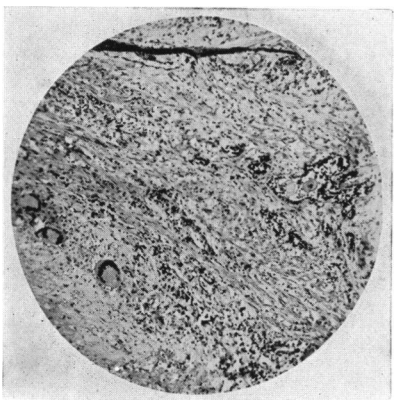

FIG. 3.—Autopsy case, showing tubercle with giant-cells and caseation; also prostatic tubule with amyloid body.

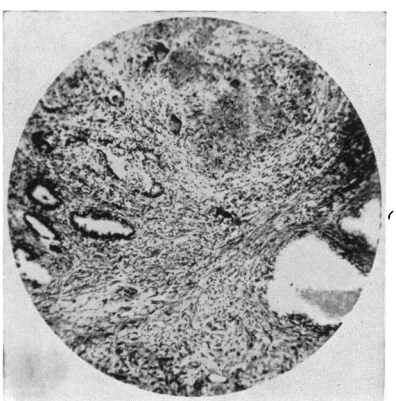

FIG. 4.—Author's case, showing formation, caseation and some normal prostatic tubules.

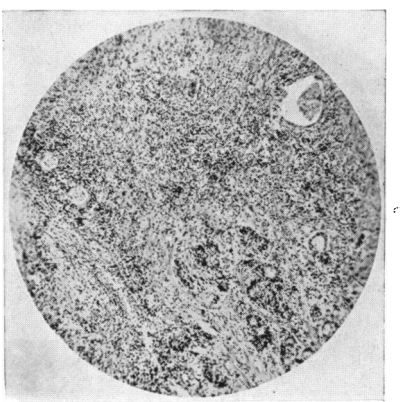

FIG. 5.—Author's case, showing high degree of infiltration.

culous focus in the body, at least active. The patient finally left the hospital. He underwent a subsequent operation for closure of the fistula, which has remained closed. Unfortunately, I have not been permitted to make a cystoscopic examination, but the patient assures me that except for occasional frequency he is quite free from any urinary disturbance. His urine contains considerable pus. Per rectum there is nothing abnormal to be felt. No tubercle bacilli can be found in the urine.

The histologic findings by Dr. Edwin Kirk, hospital pathologist, are as follows: "Prostate gland about 6 cm. long, 4.5 cm. wide. Both lateral lobes swollen, middle lobe enlarged. Two or three wart-like excrescences on posterior aspect of one lateral lobe. Gland feels hard, rather nodular. Small whitish areas looking like caseated or necrotic areas. Paraffin sections show typical tuberculosis of prostate with some caseation and considerable glandular hyperplasia; diffuse but local in distribution.

"On tubercle stain, the tubercle bacilli are found in several of the caseated areas, the rod form, and in one area the streptothrix type."